



JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY

REQUEST FOR PROPOSAL

REQUEST FOR PROPOSAL NO.: JSL-52404

FOR:

MARS UHF PROXIMITY ANTENNA

PROPOSALS ARE TO BE RECEIVED AT JPL NO LATER THAN:

Date: August 9, 2004

Local Time: 3:00 p.m.

COMMUNICATIONS IN REFERENCE TO THIS RFP

It is requested that any communication in reference to this RFP be in writing and directed to the attention of:

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Title: Subcontracts Manager

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Date of Issuance: July 14, 2004

TABLE OF CONTENTS

RFP No.: JSL-52404

1. REQUEST FOR PROPOSAL

	Pages
GENERAL INSTRUCTIONS.....	1
1.0 GENERAL REQUIREMENTS/INFORMATION	1
2.0 LATE PROPOSALS.....	1
3.0 SOURCE EVALUATION AND SELECTION PROCESS	2
4.0 EXCEPTIONS TO THE GENERAL PROVISIONS (GPS) AND/OR ADDITIONAL GENERAL PROVISIONS (AGPS).....	3
VOLUME I - RFP TECHNICAL/MANAGEMENT PROPOSAL INSTRUCTIONS	4
1.0 MANDATORY QUALIFICATION(S)	4
2.0 OPTION EVALUATION	4
3.0 TECHNICAL/MANAGEMENT PROPOSAL INSTRUCTIONS	4
VOLUME II - COST INSTRUCTIONS	8
1.0 PROPOSAL PRICING PROVIDE A TOTAL PRICE FOR EACH ITEM LISTED IN ARTICLE 2 OF THE SPECIMEN SUBCONTRACT.	8
2.0 SPECIAL TOOLING AND SPECIAL TEST EQUIPMENT	8
3.0 PARTIAL PAYMENTS	8
4.0 PROGRESS PAYMENTS.....	8
5.0 (THIS PARAGRAPH IS INTENTIONALLY LEFT BLANK)	8
6.0 SUPPLEMENTAL BUSINESS/COST INFORMATION.....	8
VOLUME III - PAST PERFORMANCE INSTRUCTIONS.....	9
1.0 INTRODUCTION.....	9
2.0 PAST PERFORMANCE.....	9

ATTACHMENTS TO THE SOLICITATION. See form JPL 2839 for a list of Attachments

This Section of this RFP consists of those forms and documents containing information applicable to this RFP. Group A Attachments must be completed and attached to your proposal. Group B Attachments consist of forms and documents for informational purposes only. *Both A and B Attachments can be found through the electronic address identified below.* Hard copies of the Group B Attachments will be mailed by request only. Note that Group B Attachments are very important and may become requirements under the Contract.

World Wide Web: <http://acquisition.jpl.nasa.gov/e2000.htm>

2. SPECIMEN CONTRACT, Dated May 24, 2004

GENERAL INSTRUCTIONS

1.0 GENERAL REQUIREMENTS/INFORMATION

The effort to be performed will be in accordance with the Specimen Contract; if you choose to submit more than one proposal for this effort, each proposal must be responsive to JPL's requirements, independently complete and under separate cover. JPL reserves the right to retain all proposal information submitted in response to this RFP.

This RFP does not commit JPL or the United States Government to pay any proposal preparation and related costs incurred in the submission of your proposal. JPL reserves the right to reject all proposals.

1.1 Address and Identification for Timely Handling of Proposal

Affix a yellow adhesive label to the envelope/container containing the original proposal, with JPL's address, the name of the individual designated on the cover page of this RFP (including the mail stop), and the RFP No. JSL-52404. All envelopes/containers must bear the RFP No.

1.2 Hand-Carried Proposals

Hand-carried proposals must be delivered to JPL's Visitor Control Center, 4800 Oak Grove Drive, Pasadena, Building 249 for time/date stamping, between the hours of 7:30 a.m. - 4:30 p.m., Monday through Friday by the time and date stated on the RFP cover sheet.

1.3 Data

If the proposal contains data that is not to be disclosed for any purpose other than for proposal evaluation, you must place on the cover sheet of each proposal volume the following wording:

"Data contained in pages _____ of this proposal furnished in connection with RFP No. JSL-52404 shall not be used or disclosed, except for evaluation purposes, provided that if a subcontract is awarded to this offeror as a result of or in connection with the submission of this proposal, JPL and the Government shall have the right to use or disclose this data to the extent provided in the subcontract. This restriction does not limit JPL's right to use or disclose any data obtained from another source without restriction."

1.4 Requests for Clarification/RFP Addenda

During the proposal preparation period, all requests for clarification and/or additional information, must be submitted in writing or by e-mail to the individual referenced by "Attention:" on the RFP cover page. When appropriate, responses to requests, as well as any JPL initiated changes, will be provided to all prospective proposers as addenda to the RFP.

2.0 LATE PROPOSALS

Any proposal, portion of a proposal, or unrequested proposal revision received at JPL after the time and date specified on the cover page of this RFP will cause the entire proposal to be late. Late proposals will not be considered for award, except under any of the following circumstances:

- 2.1 JPL determines that the late receipt was due solely to a delay by the U.S. postal service for which the offeror was not responsible. Timely postmark or receipt of registered, certified mail or express mail "next-day service," establishing the time of deposit must be evidenced.

- 2.2 JPL determines that the proposal was late due solely to mishandling by JPL after receipt at JPL, provided that the timely receipt at JPL is evidenced.
- 2.3 No acceptable proposal(s) are received as of the proposal due date(s) and time.

NOTE: If an emergency or unanticipated event interrupts normal JPL processes so that solicitation responses cannot be received by the JPL office designated for receipt by the exact time specified in the solicitation, and urgent JPL requirements preclude amendment of the solicitation closing date, the time specified for receipt of proposals will be extended to the same time of day specified in the solicitation on the first work day on which normal JPL processes resume.

3.0 PAST PERFORMANCE

JPL requests you to submit your Past Performance by July 30, 2004, but not later than August 9, 2004 to facilitate proposal evaluation. Clearly mark the outside of the package as follows:

RFP JSL-52404
Past Performance

4.0 SOURCE EVALUATION AND SELECTION PROCESS

The basis of source selection is predicated on the following (JPL, at its discretion, may waive minor informalities and minor irregularities in proposals received.):

- 4.1 Proposals will be evaluated in the areas of technical and management as described in the Technical/Management Proposal Instructions of the RFP. Although cost/price will not be scored, the proposed cost/price is a substantial factor in source selection but is approximately equal in importance to the combined technical and management areas. Source selection will be based on the responsive, responsible (within the meaning of Federal Acquisition Regulation 9.1) offeror whose proposal is determined to represent the best value to JPL. The closer the proposers are in the qualitative (evaluated) technical and/or management areas, the more important cost/price can become. JPL may select for negotiations a source whose qualitative merits are lower but whose lower cost/price is commensurate with providing the best overall "value." Conversely, a source may be selected whose cost/price is higher, but their higher qualitative merits are commensurate with providing best overall "value." The proposal evaluation process is as follows:
 - 4.1.1 Proposals are evaluated against the pre-set areas of evaluation outlined in the Technical/Management Proposal Instructions of the RFP. An analysis of the cost/price details (if applicable) is performed and proposed costs/prices are compared.
 - 4.1.2 Cost/price proposals are reviewed for mathematical accuracy, rate application, price omissions, and price reasonableness. If the Buy American Act or rent-free use of Government-furnished property applies, the cost/price will be adjusted as required for the purpose of evaluation.
 - 4.1.3 JPL may, at its discretion, conduct limited communications with one or more proposer(s) for the purpose of determining whether the proposer(s) should be included in the competitive range. Such pre-competitive range communications may be conducted to enhance JPL understanding of proposal(s) and may be used to: (i) validate the proposed cost/price; (ii) to clarify omissions, ambiguities and uncertainties in the proposal's supplemental business/cost information; and to clarify relevant past performance information. Proposers not considered within the competitive range are eliminated from further consideration and are so notified.

- 4.1.4 JPL may make source selection after the initial proposal evaluation or may conduct discussions with the proposers determined to be within the competitive range. The purpose of the discussions is to assist the evaluators in fully understanding each proposal by verifying strengths and weaknesses, discussing any omissions and ambiguities, verifying the validity of the proposed cost/price, assessing the proposed personnel and examining the proposer's capabilities for performing the work. JPL may also request cost/price proposal deltas in order to correct errors, omissions, or ambiguities in the proposal. NOTE: Only those cost/price deltas specifically requested by JPL will be accepted.
- 4.1.5 For proposals on cost type subcontracts, JPL's final evaluation may include completing a thorough assessment of the cost realism of each cost estimate and comparing the cost estimates. In performing this assessment, JPL may develop a "probable cost" for each proposer. "Probable cost" is defined as JPL's best estimate of the cost of any contract that is most likely to result from the offeror's proposal.
- 4.1.6 Upon completion of the initial evaluation findings, any discussions, and any cost/price delta(s), a final evaluation is conducted resulting in the selection of a Contractor(s) for negotiations. In performing its cost assessment related to proposals for cost reimbursement subcontract (but typically not for fixed priced), JPL may develop a "probable cost" for each proposer, which is JPL's best estimate of the cost of any contract that is most likely to result from the offeror's proposal (Note: JPL reserves the right to reject all proposals).

5.0 EXCEPTIONS TO THE GENERAL PROVISIONS (GPS) AND/OR ADDITIONAL GENERAL PROVISIONS (AGPS)

- 5.1 Exceptions allowed: A large number of exceptions or one or more significant exceptions to the GPs and/or AGPs may make your proposal unacceptable for evaluation. Provide a detailed explanation, including the rationale, for any exceptions you take. Proposers who submit proposals with exceptions may be selected for negotiations. However; if an agreement cannot be negotiated, your proposal may be rejected.

**VOLUME I
RFP TECHNICAL/MANAGEMENT
PROPOSAL INSTRUCTIONS**

Present and organize your proposal in accordance with the following:

1.0 MANDATORY QUALIFICATION(S)

- 1.1 There are no Mandatory Qualification Criteria for this RFP.

2.0 OPTION EVALUATION

- 2.1 The Specimen Subcontract contains an Option Article. Both the basic Subcontract requirements and the Subcontract Option Article will be evaluated for source selection purposes as follows:

- ☒ The cost/price estimate and the credibility thereof.
☒ Technical/Management merit (as determined by the below Part 3.0).

3.0 TECHNICAL/MANAGEMENT PROPOSAL INSTRUCTIONS

3.1 INTRODUCTORY INSTRUCTIONS

JPL will evaluate Volume I of your proposal based on the information asked for in the below “INSTRUCTIONS,” in respect to the degree to which your proposal meets the requirements/needs of the Specimen Subcontract. The degree to which the requirements/needs are met may include any number of considerations, such as the suitability of the various areas of the technical/management approach(es), the level of understanding of the requirements, the extent of insight into the technical/management challenges and their solution(s), the effectiveness of management structure, the relevancy of corporate and/or personnel experience, etc., as is appropriate for each area of evaluation.

VOLUME I - TECHNICAL/MANAGEMENT SOURCE SELECTION CRITERIA AND ORGANIZATION				
TECHNICAL/MANAGEMENT CRITERIA AND THEIR WEIGHTING		PROPOSAL ORGANIZATION		
Criteria	Weighting	No. of Copies	Maximum Page Limit* (indicate “none” or “#”) *	
			Recommended	Re-quired
TECHNICAL/MANAGEMENT CRITERIA		11	25	
<p>T-1 Technical Approach</p> <p>The degree to which the proposer’s technical approach will lead to the production of flight qualified UHF antennas that will operate satisfactorily in the specified environments, meeting or exceeding the applicable specifications and functional requirements of the Specimen Contract.</p> <p>Factor 1. Design and Development Methodology Factor 2. Heritage Factor 3. Testing Methodology Factor 4. Mission Assurance</p>	400			

<p>M-1 Resources</p> <p>The degree to which the proposer possesses the management skill and key personnel necessary to successfully conduct this effort.</p> <p>Factor 1. Management Approach</p> <p>Factor 2. Capability and Availability of Key Personnel</p>	300	
<p>M-2 Relevant Flight-Qualified Experience</p> <p>The degree to which the proposer's related experience is directly applicable and will contribute towards manufacturing flight qualified UHF antennas.</p> <p>Factor 1. Related Experience in Space Borne Missions</p> <p>Factor 2. Existing Manufacturing Facilities</p> <p>Factor 3. Materials</p>	300	
Total Score Possible:	1,000	
<p>*If "Page Limit" is checked: Any required page limitations included in an RFP shall be <u>strictly</u> enforced. A page is each face of a piece of paper containing substantive, evaluable information; page size: 8 ½" x 11"; any drawings/photos are included (foldouts will be considered 2 or more pages); single spacing minimum; font size not less than 10; all margins ½" or greater. If "Required" page limit, no pages beyond the number specified will be evaluated. Unless requested, mockups, models, samples, hardware, or software of any kind must not be furnished and will not be considered.</p>		

3.2 TECHNICAL/MANAGEMENT CRITERIA AND FACTORS

Any factors listed below under the criteria are not weighted for evaluation and are not listed in any order of importance.

3.2.1 SECTION T-1. TECHNICAL APPROACH

This criterion is based on the degree to which the proposer's technical approach will lead to the production of flight qualified UHF antennas that will operate satisfactorily in the specified environments, meeting or exceeding the applicable specifications and functional requirements of the Specimen Contract.

Design and Development Methodology

Describe the methodology for the design and development of flight qualified UHF antenna to meet technical specifications presented in the Specimen Contract. Address in particular the expected performance characteristics of the antenna or antenna elements as identified in Exhibit I, of the Specimen Contract. Identify theoretical calculations and actual performance characteristics. Describe in detail the method of fabrication for the antenna, the thermal and mechanical characteristics of the antenna including details of the deploying mechanism if applicable, and stages in the fabrication process that require significant amount of time in the antenna construction. Provide details that show how the proposed design meets the requirements specified in the Specimen Contract. Identify any unresolved design/development issues and describe your approach for resolution. Detail the extent to which these open issues might affect the delivery schedule outlined in the Specimen Contract. Describe, in detail where applicable, your manufacturing approach and process steps for the fabrication of the flight qualified engineering model hardware.

Heritage

Discuss the heritage of all proposed processes and materials that you intend to use and the rationale.

Testing Methodology

Discuss the test plans and procedures that you intend to use for verifying that your hardware deliverables meet the requirements in the Specimen Contract. Describe the test facilities, instrumentation, and equipment that you intend to use in developing the Bread Board and Engineering Model hardware. Highlight any unique testing procedures that may be required to support this effort and provide your rationale for using these procedures.

Mission Assurance

Describe your approach relative to Quality Assurance (hardware and software), Reliability Engineering Electronic Parts, Radiation Effects, Configuration Management and Materials & Processes. Discuss your approaches to these disciplines to meet the requirements for the Bread-Board and the Engineering Model hardware. Describe the process you intend to implement for flowing down JPL's requirements for this work effort. Describe the process you intend to implement for flowing down JPL's requirements to your suppliers. Describe your proposed closed-loop problem reporting system. Describe your risk management approach in detail. Indicate whether your proposed overall Mission Assurance program is currently being implemented at your facility. If not, describe which parts are not currently being implemented.

3.2.2 SECTION M-1. RESOURCES AND MANAGEMENT

This criterion is based on the degree to which the proposer's resources and management approach provides for effective organization, implementation and monitoring and control of the effort.

Management Approach

Describe your intended management plan for executing the work effort in the Specimen Contract, addressing, as a minimum, the following:

- Project organization and functional roles.
- Detailed Work Breakdown Structure (WBS).
- Detailed project schedule, identifying project reserve and critical path.
- Management and control of technical performance, schedule, and technical/schedule margins.
- Intended subcontractors and subcontract management plans, including subcontracted test facilities.

Capability and Availability of Key Personnel

Identify, by name and function, your proposed key personnel. Discuss the percentage of time each of these individuals will be dedicated to this work effort, their availability, and their qualifications for their functional assignment. Provide resumes for your proposed key personnel.

3.2.3 SECTION M-2. RELEVANT FLIGHT-QUALIFIED EXPERIENCE

This criterion is based on the degree to which the proposer's related experience is directly applicable and will contribute towards manufacturing flight-qualifiable UHF antenna that will meet the requirements of the Specimen Contract.

Related Experience in Space Borne Missions

Describe your company's past experience, over the past 5 years, building and providing flight-qualified hardware for space borne missions. Highlight those projects which are most similar to the one described in the Specimen Contract, and those which are most recent in your history. Describe your organization's related experience in performing manufacturing control procedures, quality assurance and reliability programs that are necessary for producing flight qualified antennas or antenna arrays that will meet the requirements of the Specimen Contract.

Existing Manufacturing Facilities

Describe existing facilities specialized in the construction of flight qualified or qualifiable hardware, with an emphasis on those parts of your facility that will be used for the development of the required Bread-Board and Engineering Model, flight-qualifiable antenna. Describe the special testing at your facility that you perform on flight-qualified parts that will be used for the proposed effort. Describe the facilities and equipment that will be used and discuss their availability during the time period of the contract.

Materials

Describe materials and manufacturing techniques that will be employed in the construction of the required Bread-Board and Engineering Model antennas. Describe any special considerations that have gone into the choice of materials, and their use in previous flight-qualified programs performed by your facility.

VOLUME II - COST INSTRUCTIONS

This portion of the proposal instructions outlines the requirements to be followed in preparing the cost proposal.

1.0 PROPOSAL PRICING

Provide a total price for each item listed in Article 2 of the Specimen Subcontract.

2.0 SPECIAL TOOLING AND SPECIAL TEST EQUIPMENT

Describe each item of Special Tooling and Special Test Equipment proposed; indicate where and when each item is to be used and the extent of usage.

3.0 PARTIAL PAYMENTS

Partial Payments will not be allowed under this Subcontract.

4.0 PROGRESS PAYMENTS

Progress payments will be allowed under this Subcontract in accordance with the Additional General Provision entitled “Progress Payments” or “Progress Payments (Small Business)” incorporated into the Specimen Subcontract.

5.0 (THIS PARAGRAPH IS INTENTIONALLY LEFT BLANK)

6.0 SUPPLEMENTAL BUSINESS/COST INFORMATION

6.1 Financial Statement

Submit a copy of your annual financial statements for the last three years and any information regarding additional resources required to perform the proposed effort such as an established line of credit or other financial resource.

6.2 License and Royalty Information

If your proposal contains costs for royalties or licenses, indicate the amount and be ready to furnish details.

6.3 Attachments

The Section of this RFP entitled “Attachments” consists of those forms and documents containing information applicable to this RFP. Group A Attachments must be completed and attached to your cost proposal. Group B Attachments consist of forms and documents for informational purposes only and can be accessed via the electronic address provided below. Hard copies of the Group B Attachments will be mailed by request only. Note that the Group B Attachments are very important and may be required under the Subcontract.

VOLUME III – PAST PERFORMANCE INSTRUCTIONS

1.0 INTRODUCTION

This portion of the proposal instructions sets forth the requirements to be followed in preparing your Volume III, Past Performance, submittal. Please restrict your submittals to one page per contract. The information provided will be used to help determine responsibility.

As stated previously in the General Instructions of this RFP, JPL requests you to submit your Past Performance by July 30, 2004, but not later than August 9, 2004 to facilitate proposal evaluation. Clearly mark the outside of the package as follows:

RFP JSL-52404
Past Performance

2..0 PAST PERFORMANCE

Provide a synopsis of all contracts similar to this work effort performed by your organization within the past five (5) years, including similar on-going efforts. List all work performed for JPL in the past five (5) years.

This synopsis, which must address all efforts discussed in your Volume 1 discussion under “Related Experience,” at a minimum, shall include the following customer contract information:

- (a) Contract number;
- (b) Description of effort performed under the Contract;
- (c) Customer name and current address;
- (d) Current cognizant contract administrator and technical contact;
- (e) Current telephone and fax numbers;
- (f) Period of performance;
- (g) Contract type;
- (h) Average number of personnel assigned to contract effort.
- (i) Initial and final cost or price.

Note: You are requested to inform the contact people for each referenced contract that JPL will be requesting information regarding your past performance and that their expedited cooperation is requested.



ATTACHMENTS TO THE SOLICITATION

The following attached forms and documents are organized into two major groupings:

1. Group A must be completed and returned as part of your quotation or proposal.
2. Group B are for information purposes only in preparing your quotation/proposal.

NOTE TO PROPOSERS: Forms and documents listed below are not applicable unless the box preceding the Attachment Number is marked ☒.

GROUP A - Complete and return as part of your quotation/cost proposal, as applicable:

Attachment	Title and Form Number
<input checked="" type="checkbox"/> A-1	Acknowledgment (form JPL 2384)
<input type="checkbox"/> A-2	Cost Accounting Standards (form JPL 2842)
<input checked="" type="checkbox"/> A-3	Government Property Questionnaire (form JPL 0544)
<input type="checkbox"/> A-4	(RESERVED)
<input type="checkbox"/> A-5	(RESERVED)
<input type="checkbox"/> A-6	Notice of Total Small Business Set-Aside (form JPL 4022)
<input type="checkbox"/> A-7	Notice of Total Small Business Set-Aside - Modified (form JPL 4023)
<input type="checkbox"/> A-8	(RESERVED)
<input type="checkbox"/> A-9	(RESERVED)
<input type="checkbox"/> A-10	(RESERVED)
<input type="checkbox"/> A-11	(RESERVED)
<input type="checkbox"/> A-12	Foreign Acquisitions - Certification of Eligibility for Exemption from/Certain JPL General Provisions, Additional General Provisions, and Certifications (form JPL 2881)
<input type="checkbox"/> A-13	(RESERVED)
<input type="checkbox"/> A-14	Past Performance (form JPL 0358)
<input checked="" type="checkbox"/> A-15	Cost Element Breakdown (form JPL 0549)
<input type="checkbox"/> A-16	Determination of Lowest Overall Price - Time-and-Material Proposals (form JPL 0359)
<input type="checkbox"/> A-17	Determination of Lowest Overall Price - Labor Hour Proposals (form JPL 0363)
<input type="checkbox"/> A-18	Determination of Lowest Overall Price - Labor-Hour Proposals to JPL-Provided Rate Ranges (form JPL 0364)
<input type="checkbox"/> A-19	Cost Elements Breakdown (Short Form) (form JPL 0549-1)

GROUP B - For information only:

Attachment	Title and Form Number
<input checked="" type="checkbox"/> B-1	Waiver of Rights to Inventions (form JPL 62-301)
<input type="checkbox"/> B-2	Summary Work Breakdown Structure (no form number)
<input type="checkbox"/> B-3	Notice to Offerors (form JPL 2843)
<input type="checkbox"/> B-4	Instructions for Patent Agreement for Use in Support Service Contracts (form JPL 2844) Patent Agreement (form JPL 1929)
<input type="checkbox"/> B-5	Notice of Requirement of Pre-award On Site Equal Opportunity Compliance Review (form JPL 3553)
<input type="checkbox"/> B-6	Requirements for A Subcontracting Plan (form JPL 0294)
<input type="checkbox"/> B-7	Security Requirements for a Classified Contract (form JPL 2891)
<input type="checkbox"/> B-8	Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity(Executive Order 11246) (form JPL 2899)
<input type="checkbox"/> B-9.1	Notice to Prospective Contractors of Requirement for an Environmental Audit of the Lease Facilities (form JPL 2896)
<input type="checkbox"/> B-9.2	Notice to Prospective Contractors of Requirement for an Environmental Audit of the Lease Facilities – Alternate (form JPL 2896-1)
<input type="checkbox"/> B-10	Certificate of Current Cost or Pricing Data (form JPL 2496)
<input type="checkbox"/> B-11	Standards of Conduct and Procedures for Handling Contractor Personnel Problems, Discipline, and Separation (form JPL 4412)
<input type="checkbox"/> B-12	(RESERVED)
<input type="checkbox"/> B-13	Claims for Exceptions to Cost or Pricing Data (form JPL 2703)
<input type="checkbox"/> B-14	Billing Instructions – Cost Type Contract (form JPL 2716)
<input type="checkbox"/> B-15	Billing Instructions – CREI Contract (form JPL 2717)
<input type="checkbox"/> B-16	Billing Instructions – Labor-Hour/Time-and-Material Contract (form JPL 2718)
<input type="checkbox"/> B-17	JPL Contractor Safety and Health Notification (form JPL 2885)